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Before the

Federal Communications Commission

Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Revision of the Commission's Rules To)
Ensure Compatibility with)
Enhanced 911 Emergency Calling Systems)

CC Docket No. 94-102
RM-8143

To: The Commission

COMMENTS OF U S WEST WIRELESS, LLC

Pursuant to Section 1.429(f) of the Commission's rules, 47 C.F.R. § 1.429(f),

U S WEST Wireless, LLC ("U S WEST"), hereby files comments in support of petitions for reconsideration filed by Aerial Communications, Inc., Nokia and Motorola (jointly), and Sprint PCS of the *Third Report and Order* in the above-captioned proceeding.¹ These petitions demonstrate that the deadlines and accuracy standards adopted for carrier implementation of handset and hybrid-based Phase II enhanced 911 ("E-911") capabilities may prove not viable, particularly for CDMA-based carriers, and are without record support.² As discussed herein, alternative deadlines and requirements are more feasible and will serve the public interest. Accordingly, the requested reconsideration should be granted.

¹ *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Third Report and Order*, CC Docket No. 94-102, FCC 99-245 (rel. Oct. 6, 1999), 64 Fed. Reg. 60126 (Nov. 4, 1999).

² Petition for Reconsideration of Aerial Communications, Inc. in CC Docket No. 94-102, filed Dec. 6, 1999 ("Aerial Petition"); Petition for Reconsideration of Nokia Inc. and Motorola Inc. in CC Docket No. 94-102, filed Dec. 6, 1999 ("Nokia/Motorola Petition"); Sprint PCS Petition for Reconsideration in CC Docket No. 94-102, filed Dec. 6, 1999 ("Sprint PCS Petition").

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BACKGROUND/INTRODUCTION

In February 1999, U S WEST petitioned for a waiver of the original Phase II deadline to facilitate the possible implementation of a phased-in handset-based solution.³ In that petition, U S WEST noted that while it had not committed to a particular E-911 technology, handset and so-called “hybrid” solutions appeared to hold significant promise based on results of tests completed, to date. U S WEST advised the Commission that there were no commercially viable E-911 Phase II ALI solutions available, handset- or network-based, for CDMA-based carriers.⁴ Further, in response to the Commission’s request for additional comments on Phase II implementation, U S WEST advised that while it had discussed in particular the possibilities of a hybrid solution with one of its vendors, the situation with respect to commercially viable E-911 solutions remained unchanged and that, for this reason, U S WEST still could not commit to a particular technology.⁵

U S WEST supports much of the *Third Report and Order*. The Commission has appropriately recognized the safety benefits that could result from a potentially lower cost, higher accuracy ALI solution and the public interest benefits of a technology-neutral approach to Phase II

³ See U S WEST Petition for Waiver, filed Feb. 4, 1999. References to “handset-based” solutions herein include “hybrid solutions” as defined in the *Third Report and Order*. See *Third Report and Order* ¶ 23 n.23. As Sprint PCS discusses in its petition, however, the rules do not facilitate the use of hybrid solutions with a network/software element. Sprint PCS Petition at 9-10. The Commission’s decision to “lump together” deadlines and accuracy requirements for handset-based and hybrid solutions, such as those discussed in U S WEST’s Further Comments, takes an overly simplistic approach to Phase II implementation. For these reasons also, the Commission should reconsider the Phase II implementation deadlines and regulatory treatment of so-called handset solutions. Such hybrid solutions promise significant public safety and other benefits, and the Commission should act to facilitate -- rather than hamper -- such solutions.

⁴ U S WEST Further Comments, filed June 17, 1999, at 2; U S WEST Waiver Petition at 7-8.

⁵ U S WEST Further Comments at 2-3.

deployment.⁶ U S WEST is very concerned, however, at the Commission's failure to account for the critical role that vendors must play in deploying Phase II solutions, whether handset- or network-based. The Commission modified Section 20.18 of the rules to provide that carriers using *handset-based* technologies are subject to mandatory deployment requirements significantly more stringent than even the most optimistic handset deployment projections included in the record, and are subject to different benchmarks depending on whether a PSAP has requested the service.⁷ In doing so, the Commission has ignored the overriding issue of commercial availability in determining when carrier compliance can be achieved.

Throughout this proceeding U S WEST and numerous other parties have focused on the need for the Commission to retain technological neutrality with respect to Phase II solutions. Parties have also emphasized the essential fact that carriers' ability to comply with Phase II deadlines is entirely dependent on the commercial availability of solutions from vendors for CDMA systems and others.⁸ Two carriers -- Sprint PCS and Aerial Communications -- and two vendors filing jointly -- Nokia and Motorola -- have now petitioned the Commission to reconsider the rules adopted in the *Third Report and Order*. The Sprint PCS and Nokia/Motorola petitions in particular underscore the concerns raised by a number of carriers earlier in this proceeding regarding technological neutrality and the need to account for the commercial availability of ALI solutions.

⁶ See *Third Report and Order* ¶ 36.

⁷ 47 C.F.R. §§ 20.18(f)-(g); 64 Fed. Reg. at 60130-131.

⁸ U S WEST Further Comments at 4; AirTouch Communications, Inc. Further Comments, filed June 17, 1999, at 12; BellSouth Corp. Further Comments, filed June 17, 1999, at 6; PrimeCo Personal Communications, L.P. Further Comments, filed June 17, 1999, at 4-5; Sprint PCS Further Comments, filed June 17, 1999, at 3.

For the reasons discussed in the petitions and herein, the Commission should revise the deployment deadlines and accuracy requirements for handset-based ALI solutions.

DISCUSSION

I. THE PHASE II IMPLEMENTATION DEADLINES FOR HANDSET-BASED SOLUTIONS ARE WITHOUT RECORD SUPPORT AND SHOULD BE MODIFIED TO ACCOUNT FOR COMMERCIAL AVAILABILITY

U S WEST agrees with Sprint PCS that the deployment schedules for handset-based Phase II solutions are without record support.⁹ The Commission stated that the ALI deployment schedule “reflect[s], in large measure, a combination of recommendations” submitted by two parties in particular, the Advanced E911 Coalition (“Coalition”) and APCO.¹⁰ The deadlines in the Coalition proposal, however, have the critically important precondition of *handset availability* -- a fact which the Commission fails to acknowledge in the *Third Report and Order*, even as it relies on that proposal as a basis for its Phase II implementation rule.¹¹ The Nokia/Motorola Petition makes clear that carriers’ concerns for commercial availability are well-founded.

While progress continues to be made in standards development, no handset- or network-based solutions are commercially available, and U S WEST has been unable to obtain precise information from its vendors as to likely deployment dates.¹² In any event, Nokia and Motorola

⁹ See Sprint PCS Petition at 5.

¹⁰ *Third Report and Order* ¶ 43.

¹¹ Coalition *Ex Parte* Presentation. U S WEST notes that, contrary to the *Third Report and Order*, it is *not* a member of the Coalition.

¹² As Sprint PCS notes, the current CDMA standard, IS-801, supports a number of GPS and non-GPS handset solutions. See Sprint PCS Petition at 10 (citing Telecommunications Industry Ass’n TR.45, *Position Determination Service Standard for Dual-Mode Spread Spectrum Systems*, TR.45.5/99.10/15.11, IS-801 (Pub. Ver. Oct. 15, 1999)).

confirm that the October 1, 2001 date -- much less the March 1, 2001 date close at hand -- “does not provide a realistic time in which to design, manufacture and distribute ALI-capable handsets in the volumes required by the new rules.”¹³

In short, the Commission failed to address or account for the assumptions underlying the very record evidence it cites in support of the rules. The record does *not* support the timeliness set forth in the Commission’s rules. In contrast, the timetables proposed by Nokia/Motorola are more realistic and more consistent with the record in this proceeding, in large part because they (not surprisingly) better account for vendor capabilities and the status of vendor deployment activities. Furthermore, the deployment of hybrid solutions involves more than simply handset turnover and, while the Commission tersely states that “[t]o the extent that hybrid ALI approaches are deployed, any non-handset based equipment or operations that are needed should be in place when the PSAP has satisfied the applicable conditions and is ready to use ALI information,” the implementation schedule mandated in the Commission’s rules does not account for such equipment and effectively requires deployment actions well in advance of the deadlines prescribed.¹⁴

Thus, the schedule in the rules has been established in a regulatory “vacuum” of sorts -- and without regard to commercial realities. For this reason, if the current schedule is maintained, the

¹³ Nokia/Motorola Petition at 5. Indeed, while the Commission appears to have relied significantly on information provided by QUALCOMM, *see Third Report and Order* ¶ 27, U S WEST cautioned that as to all solutions, including QUALCOMM’s hybrid solution being developed at that time, “that additional testing in certain environments will be required, and certain technical issues must be resolved before carriers can commit to *any* handset-based solution.” U S WEST Further Comments at 8. This remains the case. U S WEST further notes that, while QUALCOMM reportedly continues to develop certain ALI-capable technologies, it no longer manufactures handsets.

¹⁴ *Third Report and Order* ¶ 48.

Commission should expect numerous petitions for waiver of the deployment schedule based on the lack of availability of handsets from vendors.¹⁵ By contrast, a more feasible implementation schedule -- incorporating commercial availability -- will mitigate the need for carriers to seek such waivers. Further, this schedule will still well-serve the public interest as it will allow carrier deployment of promising handset and hybrid solutions for Phase II compliance purposes. Public safety interests are furthered by adopting realistic and achievable compliance benchmarks.

In addition, and as Sprint PCS discusses, the “stepped up” deployment obligation imposed for markets in which the PSAP has requested service (“[w]ithin six months or by October 1, 2001, whichever is later . . .”) is unworkable and without support in the record.¹⁶ Contrary to the Commission’s intimations, no commenting party proposed such a bifurcated approach. Indeed, the only record evidence cited in support of the Commission’s approach was APCO’s original May 1999 proposed implementation schedule. While APCO advocated a more aggressive deadline than carriers, it recommended that *80 percent of handsets as of December 31, 2001* be ALI-capable -- a standard *less* burdensome than that adopted in the rules.

While U S WEST does not support APCO’s proposal, even APCO’s 80 percent figure provided at least a degree of flexibility to account for handsets already in the commercial marketplace. None of the evidence submitted by commenting parties -- carriers, vendors, or PSAPs -- supports the bifurcated implementation schedule adopted by the Commission. Indeed, the “stepped-up” deployment requirement for markets where PSAP requests are concerned undermines

¹⁵ In comments filed in response to the Commission’s Public Notice on Phase II testing methodologies, U S WEST advised that, at that time, one vendor informally indicated that commercially available products would not likely be available until *3Q2001*.

¹⁶ Sprint PCS Petition at 6-7.

the Commission's stated rationale for adoption of different rules for network and handset solutions -- the need to phase-in handset deployment.¹⁷ Moreover, the burden of complying with the bifurcated compliance schedule is made more acute by the Commission's decision to eliminate the requirement for carrier cost recovery as a pre-condition for carrier compliance.¹⁸

U S WEST also agrees with Sprint PCS that the implementation schedule is not workable.¹⁹ As a practical matter, there is not necessarily a direct correlation between the time that a PSAP request is made and the time that handsets are sold to customers and activated. Thus, requiring 100 percent of all new handsets activated to be ALI-capable 6 months after a request fails to account for the realities of procurement, shipping, and marketing in today's wireless marketplace. It also ignores customer choice and preference in the matter. Furthermore, as the Commission has recently acknowledged, consumers can obtain handsets from a variety of outlets,²⁰ and it is simply not feasible for carriers to monitor all sales channels and pull all non-ALI capable handsets from the market.

Also, some PSAP entities have statewide jurisdiction;²¹ thus, a PSAP request for Phase II service could effectively be viewed as requiring a mandatory statewide recall of non ALI-capable

¹⁷ See *Third Report and Order* ¶¶ 8, 18, 30 (discussing policy trade-offs).

¹⁸ See *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Second Memorandum Opinion and Order*, CC Docket No. 94-102, FCC 99-352, ¶¶ 38-74 (rel. Dec. 8, 1999).

¹⁹ Sprint PCS Petition at 7-9.

²⁰ There are a number of alternative sales channels available to customers for handsets, such as consumer electronics stores, and a significant number of consumers utilize such alternatives. *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Second Report and Order*, 14 FCC Rcd. 10954, 10990 ¶ 83 (1999).

²¹ Such jurisdictions in U S WEST broadband PCS markets include Oregon and, to a lesser extent, Minnesota.

handsets -- obviously, an impossible task for carriers that would result in numerous waiver requests. Again, the Commission's decision to disregard commercial availability as a factor in determining carriers' implementation deadlines poses serious compliance issues for carriers wanting to deploy handset or hybrid solutions.²²

II. THE ACCURACY REQUIREMENTS FOR HANDSET-BASED SOLUTIONS ARE NOT BASED ON COMMERCIALY-AVAILABLE TECHNOLOGIES AND SHOULD BE REVISED

The Commission modified the Phase II accuracy standards to require different accuracy standards for different technologies. For network-based solutions, carriers are subject to an accuracy and reliability standard of 100 meters for 67 percent of calls, and 300 meters for 95 percent of calls. Carriers using handset-based solutions are subject to a standard of 50 meters for 67 percent of calls, and 150 meters for 95 percent of calls.

U S WEST agrees with Nokia/Motorola "that the more stringent requirements for handset-based solutions may be overly optimistic, especially for in-building and urban canyon uses, where obstructions limit the number of GPS satellites viewable from the handset."²³ While U S WEST continues to believe that handset-based or hybrid solutions have great potential to offer accuracy and reliability in excess of the Commission's original Phase II standard, as Nokia/Motorola note, additional testing with commercially available handsets in real world environments is necessary.²⁴ Furthermore, as U S WEST previously advised, issues involving testing and compliance methods

²² Again, CDMA carriers are in particular "straits" because of the current unavailability of commercial network solutions.

²³ Nokia/Motorola Petition at 6.

²⁴ *Id.* at 6-7.

must be appropriately resolved for carriers to choose a particular ALI technology that will meet Commission requirements.²⁵

U S WEST further submits that, given the current stage of development for handset-based solutions, a separate, significantly more stringent standard for handset-based solutions is inappropriate and, at minimum, premature. The record indicates that handset-based solutions, if commercially available, will be significantly more accurate than the Commission's original requirements and, in all likelihood, more accurate than network-based solutions.²⁶ Again, as discussed above, U S WEST does not disagree in principle with the *quid pro quo* implicit in the order.²⁷ However, the Commission's objective in adopting a separate standard, "that solutions taking advantage of a longer phase-in to achieve full ALI deployment should provide compensating advantages in performance," is facilitated *without* imposing what may prove to be an unrealistic accuracy standard for first-generation equipment.²⁸ In short, improvements in accuracy will occur by virtue of the technology itself and the business and consumer benefits resulting therefrom -- *not* by virtue of Commission imposition of accuracy requirements in advance of technological developments.

Adopting such a substantially more stringent standard based on the experimental/prototype technologies discussed in the record may again unnecessarily result in numerous waiver petitions

²⁵ See U S WEST Comments, filed October 29, 1999, at 2-4.

²⁶ See AirTouch Communications, Inc. Further Comments at 4; Integrated Data Communications Comments, filed June 10, 1999, at 17; U S WEST Further Comments at 2; Sprint PCS Further Comments at 1.

²⁷ That is, better accuracy in exchange for the phased-in approach needed for handset deployment.

²⁸ See *Third Report and Order* ¶ 74.

from carriers using handset-based ALI technologies that significantly exceed the standard applicable to network-based solutions -- and yet do not meet the accuracy standard adopted in the rules. At a minimum, the Commission should consider a less stringent handset/hybrid accuracy requirement on an interim basis, to account for the current state of testing and commercial development. Lastly, to confirm, the Commission must not impose impossible verification/compliance standards for carriers with respect to accuracy requirements, as compliance may be rendered impossible to achieve.

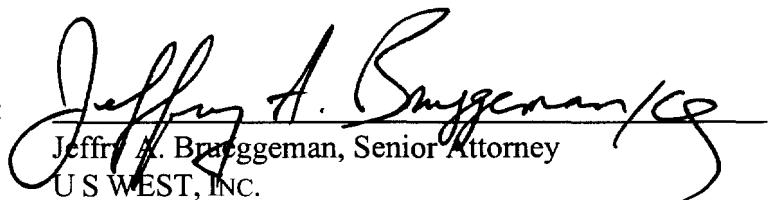
CONCLUSION

As discussed herein, U S WEST respectfully requests that the Commission grant the petitions for reconsideration by: (1) revising the unsupported and unworkable implementation schedule for carriers using Phase II handset-based solutions to account for commercial availability of equipment; and (2) adopting an achievable accuracy requirement for handset-based technologies.

Respectfully submitted,

U S WEST WIRELESS, LLC

By:

A handwritten signature in black ink, appearing to read "Jeffrey A. Braggeman/cg", is written over a horizontal line.

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